FILE NOTATIONS

Entered in N I D File ..... ✓

Entered On S R Sheet ..... ✓

Location Map Pinned ..... ✓

Card Indexed ..... ✓

I W R for State or Fee Land .....

Checked by Chief .....

Copy N I D to Field Office .....

Approval Letter .....

Disapproval Letter .....

COMPLETION DATA:

Date Well Completed 10-19-57

Location Inspected .....

Bond released
State of Fee Land .....

OW ..... WW ..... TA .....

GW ..... OS ..... PA ✓

LOGS FILED

Driller's Log 11-14-57

Electric Logs (No.) 4

E ..... I ..... E-I ✓ GR ..... GR-N ✓ Micro ✓

Lat ..... Mi-L ..... Sonic ..... Others Radioactivity Log

Core Analysis Report

Form 9-331 b
(April 1952)

X			

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Budget Bureau No. 42-R359.4.
Approval expires 12-31-60.

Indian Agency Navajo Tribe
Window Rock, Arizona
Allottee
Lease No. 14-20-603-2053

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	XX	SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

NAVAJO TRACT 157 August 8, 1957

Well No. 2 is located 660 ft. from {N/S} line and 660 ft. from {E/W} line of sec. 26

NW/4 Sec 26 (¼ Sec. and Sec. No.) | 40-S (Twp.) | 25-E (Range) | Salt Lake (Meridian)

Wildcat (Field) | San Juan (County or Subdivision) | Utah (State or Territory)

The elevation of ~~the derrick floor~~ surface above sea level is 5211 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

The above location has been staked to test the Paradox (J) Zone at approximately 5750 feet.

We will run and cementing 13-3/8" OD casing at approximately 300 ft (cemented top to bottom). We will run and cement 9-5/8" OD casing at approximately 1200 feet if necessary. We will run and cement 7" OD casing as the oil string.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company SINCLAIR OIL & GAS COMPANY
Address c/o G. L. Weger
601 Denver Club Bldg
Denver, Colorado

By [signature]
Title Asst. Div. Supt. - Production Dept

U. S. GOVERNMENT PRINTING OFFICE 16—8437b-8

COMPANY Sinclair Oil and Gas Company

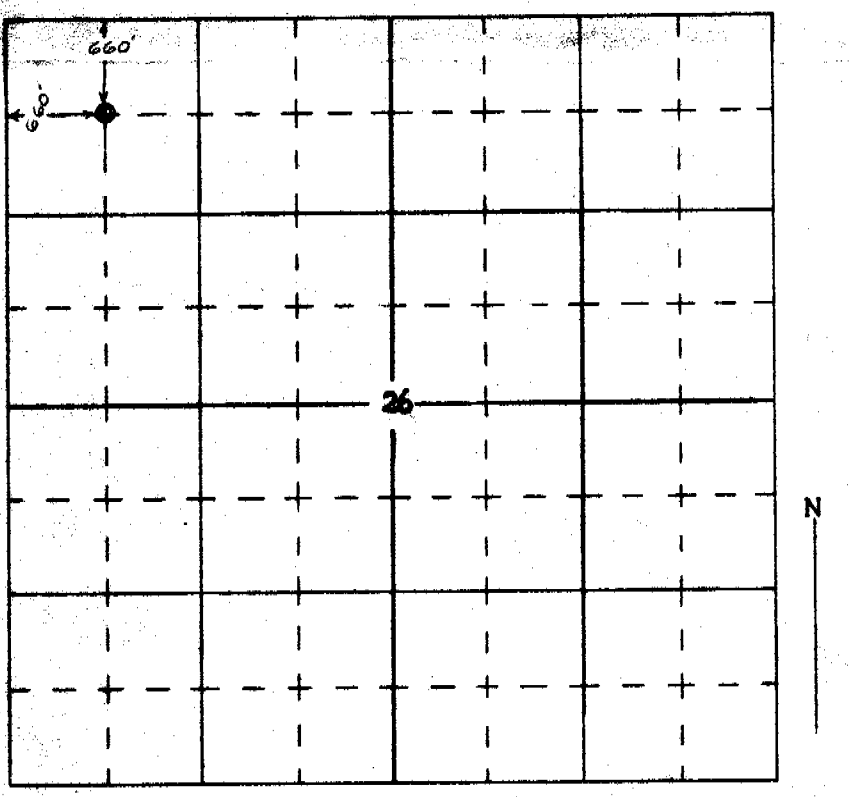
Well Name & No. Navajo Tract 157 #2 Lease No. _____

Location 660' from North line and 660' from West line

Being in NW¼NW¼

Sec. 26, T. 40 S., R. 25 E., Salt Lake, San Juan County, Utah

Ground Elevation 5211



Scale -- 4 inches equals 1 mile

Surveyed August 7, 1957

This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

Ernest V. Echohawk
Registered Land Surveyor
N. M. Reg. #1545
Practicing in Utah under laws regulating Professional Engrs. and Land Surveyors, Utah Code 1953, Title 58-10-16

United States Oil Field Surveys
Farmington, New Mexico

August 12, 1957

Sinclair Oil & Gas Company
c/o G. L. Weger
601 Denver Club Building
Denver, Colorado

Gentlemen:

This is to acknowledge receipt of your notice of intention to drill Well No. Navajo Tract 157 - 2, which is to be located 660 feet from the north line and 660 feet from the west line of Section 26, Township 40 South, Range 25 East, SLBM, San Juan County, Utah.

Please be advised that insofar as this office is concerned, approval to drill said well is hereby granted.

Yours very truly,

OIL & GAS CONSERVATION COMMISSION

CLEON B. FEIGHT
SECRETARY

CBF:en

cc: Phil McGrath
USGS, Farmington,
New Mexico

Don Russell
USGS, SLC, Ut.

Budget Bureau No. 42-R714.4.
Approval expires 12-31-60.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

ALLOTTEE Navajo
TRIBE Navajo
LEASE NO. 14-20-603-2053

LESSEE'S MONTHLY REPORT OF OPERATIONS

Note
C-K
9-23-57

State Utah County San Juan Field Wildcat

The following is a correct report of operations and production (including drilling and producing wells) for the month of August, 19 57 Navajo Tract 157

Agent's address 601 Denver Club Building *Company* Sinclair Oil & Gas Company

Denver 2, Colorado *Signed* R. W. Newport

Phone Alpine 6-2461 *Agent's title* Div. Chief Clerk - Prod Dept

SEC. AND ¼ OF ¼	TWP.	RANGE	WELL NO.	DATE PRODUCED	BARRELS OF OIL	GRAVITY	CU. FT. OF GAS (In thousands)	GALLONS OF GASOLINE RECOVERED	BARRELS OF WATER (If none, so state)	REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
NW/4 NW/4 Sec 26	40S	25E	2							Drilling at 4992

NOTE.—There were ND runs or sales of oil; ND M. cu. ft. of gas sold; ____ runs or sales of gasoline during the month. (Write "no" where applicable.)

NOTE.—Report on this form is required for each calendar month, regardless of the status of operations, and must be filed in duplicate with the supervisor by the 6th of the succeeding month, unless otherwise directed by the supervisor.

Form 9-329A
(December 1948)

16—26231-6 U. S. GOVERNMENT PRINTING OFFICE

Form 9-331 b
(April 1952)

Budget Bureau No. 42-R359.4.
Approval expires 12-31-60.

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Indian Agency Navajo Tribe
Window Rock, Arizona

Allottee 14-20-603-2053

Lease No. [illegible]

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			
Notice of Cmtg & Tstg Casing	XX		

RECEIVED
SEP 23 1957
U. S. GEOLOGICAL SURVEY
FARMINGTON, NEW MEXICO

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

NAVAJO TRACT 127 September 19, 1957, 19

Well No. 2 is located 660 ft. from [N] line and 660 ft. from [W] line of sec. 26

NW/4 Sec 26 (¼ Sec. and Sec. No.) | 40-S (Twp.) | 25-E (Range) | Salt Lake (Meridian)

Wildcat (Field) | San Juan (County or Subdivision) | Utah (State or Territory)

The elevation of the surface above sea level is 5211 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

9-15-57 Spudded 5 AM 9-15-57

9-18-57 Cmtd 13-3/8" @ 298 W/350 sx cmt Circulated cement

9-20-57 Tstd csg @ 3000# for 60". Tstd OK

9-19-57 Drlg ahead @ 5976

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Sinclair Oil & Gas Company
c/o C. Le Mager

Address 601 Denver Club Building
Denver, Colorado

By R. C. Newport

Title Div. Chief Clerk - Prod Dept

U. S. GOVERNMENT PRINTING OFFICE 16—8437b-8

Form 9-331 b
(April 1952)

Budget Bureau No. 42-R359.4.
Approval expires 12-31-60.

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Indian Agency Navajo Tribe
Window Rock, Arizona
Allottee
Lease No. 14-20-603-2053

10-7-57

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	XX
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

MANAGO MESA UNIT — September 27, 1957

Well No. 2 is located 660 ft. from {N} line and 660 ft. from {W} line of sec. 26

NW/4 SW/4 Sec. 26 (¼ Sec. and Sec. No.) | 40S (Twp.) | 25E (Range) | Salt Lake (Meridian)

Wildcat (Field) | San Juan (County or Subdivision) | Utah (State or Territory)

The elevation of the ~~derrick floor~~ surface above sea level is 5211 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

9-27-57 Prepare to run 5½" OD casing to 6155-TD, cemented with 375 sacks cement.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Sinclair Oil & Gas Company
Address c/o G. L. Wagar
603 Denver Club Building
Denver, Colorado

By R. W. Newport
Title Dist. Chief Clerk - Prod. Dept

U. S. GOVERNMENT PRINTING OFFICE 16—8437b-8

Budget Bureau No. 42-R714.3.
Approval expires 12-31-55.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

ALLOTTEE Navajo
TRIBE Navajo
LEASE NO. 14-20-603-2053

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Utah County San Juan Field Wildcat

The following is a correct report of operations and production (including drilling and producing wells) for the month of September, 19 57 Navajo Tract 157

Agent's address 601 Denver Club Building *Company* Sinclair Oil & Gas Company

Denver 2, Colorado *Signed* R. W. Newport

Phone Alpine 6-2461 *Agent's title* Div. Chief Clerk - Prod Dept

SEC. AND ¼ OF ¼	TWP.	RANGE	WELL NO.	DATE PRODUCED	BARRELS OF OIL	GRAVITY	CU. FT. OF GAS (In thousands)	GALLONS OF GASOLINE RECOVERED	BARRELS OF WATER (If none, so state)	REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
NW/4 NW/4 Sec 26	40S	25E	2							Swabbing for test 6167-TD

NOTE.—There were NO runs or sales of oil; NO M. cu. ft. of gas sold; ____ runs or sales of gasoline during the month. (Write "no" where applicable.)

NOTE.—Report on this form is required for each calendar month, regardless of the status of operations, and must be filed in duplicate with the supervisor by the 6th of the succeeding month, unless otherwise directed by the supervisor.

W Form 9-329A
(December 1948)

16—26231-5 U. S. GOVERNMENT PRINTING OFFICE

CORES AND DRILL STEM TESTS

9-20-57 Core #1, Basal Upper Hermosa, 5945-5995, Rec 37'; 6' shale, black, carbonaceous, calcareous, 2' limestone, dark grey, slightly argillaceous, anhydrite inclusions, 3' limestone, green grey, small vug porosity, stylolitic, goododor & stain, vertical fractures, 2' limestone, grey, dense, no show; 2' limestone, grey, trace, pp porosity, stain and odor; 8' limestone, grey, pp to good vug porosity, some permeability, good stain and odor, anhydrite inclusions; 7½' limestone, grey, pp to good vug porosity, permeability, appears wet; 1' limestone, grey, argillaceous, hard and tight, fossiliferous, bottom 1' black carbonaceous shale.

9-21-57 DST BASAL UPPER HERMOSA, 5952-95', open 1 hour, air immediately with good blow throughout. Rec 1050' gas cut muddy salt water. FP-85-520# 60" SIP 1920#

9-23-57 Core #2, 6040-98', Rec 58'; 5' shale, black, carbonaceous, calcareous; 5' limestone, dark grey, argillaceous, dense; 5' shale, black, calcareous, carbonaceous, slight odor on break at 6052'; 16' anhydrite, white, dense; 3' dolomite, argillaceous, dark grey, brown, anhydrite inclusions, slight odor on break; 6' limestone, dark grey, argillaceous, dense, anhydrtie inclusions fossiliferous; 6' shaley, limey, black, calcareous, anhydrite inclusions; 3' anhydrite, white, dense with shale laminations; 4' shale, black limestone with anhydrite laminations; 2' dolomite, argillaceous, dark grey, slight odor on break, 3' shale dark grey dolomite.

9-24-57 Core #3, 6098-6140'; Rec 39'; 2½' limestone, dolomite, grey, brown, black shale partings, dense, good odor on break; 1½' shale, black, calcareous; 6' limestone, dolomite, brown, granular, good odor, no porosity; 1' limestone, grey, argillaceous, dense; 1' limestone, dolomite, brown, dense, good odor; 8' limestone, argillaceous, grey, fossiliferous; 19' shale, black, fossiliferous, calcareous.

9-25-57 DST PARADOX 6094-6140'; open 1 hr., air immediately, fair blow decreasing to weak at end of trst. Rec 20' mud. FP-15-25# 60" SIP-95#

NAVAJO TRACT #157 WELL NO. 2
San Juan County, Utah

CORES AND DRILL STEM TESTS

Cored Basal Upper Hermosa, 5945-5995, Rec 37'; 6' shale, black, carb. calc.; 2' limestone, dark grey, slightly argillaceous, anhydrite inclusions; 3' limestone green gray, small vug porosity, stylolitic, good odor and stain, vertical fractures, 2' limesyone, grey, dense, no show, 2' limestone, grey, trace pinpoint porosity, stain and odor; 8' limestone, grey, pinpoint to good vug porosity, some permeability, good stain and odor, anhydrite inclusions; 7½' limestone, grey, pinpoint to good vug porosity, permeability, appears wet, anhydrite inclusions, fossiliferous; 5½' limestone, grey, dense, anhydrite inclusions, appears wet, 1' limestone, grey, argillaceous, hard and tight, fossiliferous, bottom 1' black, carb, shale.

DST, Basal Upper Hermosa 5952-95, open 1 hour, air immediately with good blow throughout. Rec 1050' gas cut muddy salt water. FP-85-520#, 60" SIP 1920#

Cored 6040-98, Rec 58'; 5' shale, black, carb, calc; 5' limestone, dark grey, argillaceous, dense, 5' shale, black, calc, carbonaceous, slight odor on break at 6052' 16' anhydrite, white, dense; 3' dolomite, argillaceous, dark grey, brown, anhydrite inclusions, slight odor on break; 6' limestone, dark grey, argillaceous, dense, anhydrite inclusions foss; 6' shale, limey black, calc, anhydrite inclusions; 3' anhydrite, white, dense, with shale laminations; 4' shale black limestone with anhydrite laminations; 2' dolomite, argillaceous, dark grey, slight odor on break; 3' shale dark grey dolomite

Cored 6098-6140 Rec 39'; 2½' limestone, dolomite, grey, brown, black shale partings, dense, good odor on break; 1½' shale, black, calc; 6' limestone, dolomite, brown, granular, good odor, no porosity; 1' limestone, grey, argillaceous, dense, 1' limestone, dolomite, brown, dense, good odor; 8' limestone, argillaceous, grey, fossilliferous; 19' shale, black, fossiliferous, calc.

DST Paradox 6094-6140; open 1 hours, air immediately, fair blow decreasing to weak at end of test. Rec 20' mud. FP-15-25# 60" SIP 95#

W

Budget Bureau No. 42-R714.4.
Approval expires 12-31-60.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

ALLOTTEE Navajo
TRIBE Navajo
LEASE NO. 14-20-603-2053

LESSEE'S MONTHLY REPORT OF OPERATIONS

11-6

State Utah County San Juan Field Wildcat

The following is a correct report of operations and production (including drilling and producing wells) for the month of October, 19 57 Navajo Tract #57

Agent's address 601 Denver Club Building Company Sinclair Oil & Gas Company

Denver 2, Colorado *Signed* R. E. Newport

Phone Alpine 6-2461 *Agent's title* Div. Chief Clerk

SEC. AND ¼ OF ¼	TWP.	RANGE	WELL NO.	DAYS PRODUCED	BARRELS OF OIL	GRAVITY	CU. FT. OF GAS (In thousands)	GALLONS OF GASOLINE RECOVERED	BARRELS OF WATER (If none, so state)	REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
NW/4 NW/4 Sec 26	40S	25E	2							Plugged and Abandoned. Refer to Notice of Intention to P&A dated 10-19-57

FINAL REPORT

40S 25E

NOTE.—There were NO runs or sales of oil; NO M. cu. ft. of gas sold; ..... runs or sales of gasoline during the month. (Write "no" where applicable.)

NOTE.—Report on this form is required for each calendar month, regardless of the status of operations, and must be filed in duplicate with the supervisor by the 6th of the succeeding month, unless otherwise directed by the supervisor.

W/

Form 9-329A
(December 1948)

16—26231-6 U. S. GOVERNMENT PRINTING OFFICE

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS 1, TEXAS

October 10, 1957

REPLY TO
706 PATTERSON BLDG.
DENVER, COLORADO

Sinclair Oil & Gas Company
601 Denver Club Building
Denver, Colorado

Subject: Core Analysis
Navajo 157-2 Well
East Aneth Field
San Juan County, Utah

Gentlemen:

Diamond coring equipment and water base mud were used to core the intervals from 5945 to 5995 and from 6098 to 6140 feet in the Navajo 157-2. Representatives of Sinclair Oil & Gas Company and of Core Laboratories, Inc. selected samples of recovered formation, and these samples were analyzed in the Farmington laboratory. The analysis was made by whole-core procedures using long segments of full-diameter core, and the results are presented in this report.

Hermosa limestone from 5953.0 to 5963.3 feet has low residual oil and high total water saturations, and is of no commercial value. The porosity in this interval also is comparatively low.

From 5963.3 to 5979.0 feet, the porosity development is substantially improved, but the total water saturations are somewhat higher than are normally associated with oil productive carbonate sections. The residual oil saturations are lower than those usually associated with oil productive carbonate rocks. However, the presence of a residual oil saturation in this fairly permeable interval justifies additional testing of the interval in order to determine the type and quantity of fluid which the formation therein is capable of producing.

Paradox dolomite from 6098.0 to 6100.5 feet has a favorable residual oil saturation, but the total water saturation is significantly higher than

is usually found in oil productive Paradox formation. It is possible that some of the water saturation may be the result of invasion by the drilling fluid filtrate, and testing of the zone may be warranted by the presence of the favorable oil saturation.

Another zone from 6102.0 to 6104.0 feet also has a residual oil saturation, but high total water saturation is present. This zone may also be tested since the porosity development and the presence of a residual oil saturation indicate the zone may have productive possibilities.

Formation from 6104.0 to 6110.2 feet has good porosity development, together with residual oil and total water saturations favorable to oil production. The permeability in the zone is low, however, ranging from 0.1 to 0.2 millidarcy, and averaging only 0.2 millidarcy. The total observed productive capacity is only 1.0 millidarcy-feet, entirely inadequate to support satisfactory rates of fluid production unless very favorable response is obtained to treatment. The porosity in the interval ranges from 10.0 to 12.1 per cent and averages 10.8 per cent, and the empirically calculated connate water saturation is 29.8 per cent of pore space.

Estimates of recoverable oil have been calculated for the Paradox formation between 6104.0 and 6110.2 feet using the observed core analysis data from this zone in conjunction with estimated reservoir fluid characteristics considered applicable. These estimates are presented on page one of the report, and are subject to the conditions set forth in the body of and in the footnotes to the summary page.

We sincerely appreciate this opportunity to be of service to you, and trust that this report will prove useful in making a preliminary evaluation of the Hermosa and Paradox formations analyzed from this well.

Very truly yours,

Core Laboratories, Inc.

J. D. Harris

J. D. Harris,
District Manager

JDH:TLK:sw

Form F-11B

CORE LABORATORIES, INC.

Petroleum Reservoir Engineering

DALLAS, TEXAS

Well Navajo 157-2

CORE SUMMARY AND CALCULATED RECOVERABLE OIL

FORMATION NAME AND DEPTH INTERVAL: Paradox 6104.0-6110.2

FEET OF CORE RECOVERED FROM ABOVE INTERVAL		6.2	AVERAGE TOTAL WATER SATURATION: PER CENT OF PORE SPACE		29.8
FEET OF CORE INCLUDED IN AVERAGES		5.2	AVERAGE CONNATE WATER SATURATION: PER CENT OF PORE SPACE	(c)	29.8
AVERAGE PERMEABILITY: MILLIDARCYS	Max.:	0.2	OIL GRAVITY: °API	(e)	40
	90° :	0.1			
PRODUCTIVE CAPACITY: MILLIDARCY-FEET	Max.:	1.0	ORIGINAL SOLUTION GAS-OIL RATIO: CUBIC FEET PER BARREL	(e)	650
	90° :	0.52			
AVERAGE POROSITY: PER CENT		10.8	ORIGINAL FORMATION VOLUME FACTOR: BARRELS SATURATED OIL PER BARREL STOCK-TANK OIL	(e)	1.36
AVERAGE RESIDUAL OIL SATURATION: PER CENT OF PORE SPACE		9.8	CALCULATED ORIGINAL STOCK-TANK OIL IN PLACE: BARRELS PER ACRE-FOOT		433

Calculated maximum solution gas drive recovery is 139 barrels per acre-foot, assuming production could be continued until reservoir pressure declined to zero psig. Calculated maximum water drive recovery is 346 barrels per acre-foot, assuming full maintenance of original reservoir pressure, 100% areal and vertical coverage, and continuation of production to 100% water cut. (*Please refer to footnotes for further discussion of recovery estimates.*)

FORMATION NAME AND DEPTH INTERVAL:

FEET OF CORE RECOVERED FROM ABOVE INTERVAL		AVERAGE TOTAL WATER SATURATION: PER CENT OF PORE SPACE	
FEET OF CORE INCLUDED IN AVERAGES		AVERAGE CONNATE WATER SATURATION: PER CENT OF PORE SPACE	
AVERAGE PERMEABILITY: MILLIDARCYS		OIL GRAVITY: °API	
PRODUCTIVE CAPACITY: MILLIDARCY-FEET		ORIGINAL SOLUTION GAS-OIL RATIO: CUBIC FEET PER BARREL	
AVERAGE POROSITY: PER CENT		ORIGINAL FORMATION VOLUME FACTOR: BARRELS SATURATED OIL PER BARREL STOCK-TANK OIL	
AVERAGE RESIDUAL OIL SATURATION: PER CENT OF PORE SPACE		CALCULATED ORIGINAL STOCK-TANK OIL IN PLACE: BARRELS PER ACRE-FOOT	

Calculated maximum solution gas drive recovery is barrels per acre-foot, assuming production could be continued until reservoir pressure declined to zero psig. Calculated maximum water drive recovery is barrels per acre-foot, assuming full maintenance of original reservoir pressure, 100% areal and vertical coverage, and continuation of production to 100% water cut. (*Please refer to footnotes for further discussion of recovery estimates.*)

(c) Calculated (e) Estimated (m) Measured (*) Refer to attached letter.

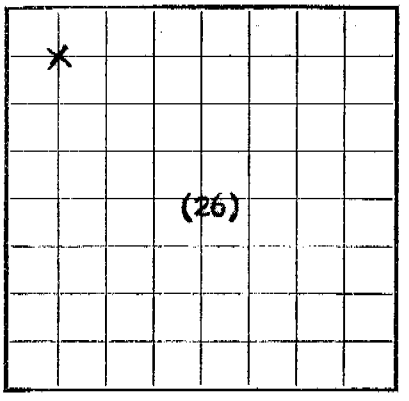
These recovery estimates represent theoretical maximum values for solution gas and water drive. They assume that production is started at original reservoir pressure; i.e., no account is taken of production to date or of prior drainage to other areas. The effects of factors tending to reduce actual ultimate recovery, such as economic limits on oil production rates, gas-oil ratios, or water-oil ratios, have not been taken into account. Neither have factors been considered which may result in actual recovery intermediate between solution gas and complete water drive recoveries, such as gas cap expansion, gravity drainage, or partial water drive. Detailed predictions of ultimate oil recovery to specific abandonment conditions may be made in an engineering study in which consideration is given to overall reservoir characteristics and economic factors.

Distribution of Final Reports

12 Copies	Sinclair Oil & Gas Company 601 Denver Club Building Denver, Colorado
1 Copy	Sunray Mid-Continent Oil Company 530 First Security Building Salt Lake City, Utah
1 Copy	Continental Oil Company Box 1121 Durango, Colorado Attention: Mr. L. W. Heiny
1 Copy	Sinclair Oil & Gas Company Box 312 Farmington, New Mexico Attention: Mr. O. J. Clark
1 Copy	Sinclair Oil & Gas Company Box 4005 Albuquerque, New Mexico Attention: Mr. C. M. Garrett

Form 9-330

25-E



LOCATE WELL CORRECTLY

40S

t Bureau No. 42-R355.4.
Approval expires 12-31-60.

U. S. LAND OFFICE Navajo Tribe

SERIAL NUMBER 14-20-603-2053

LEASE OR PERMIT TO PROSPECT .....

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company Sinclair Oil & Gas Company Address 601 Denver Club Bldg., Denver, Colo.

Lessor or Tract Navajo Tract 157 Field Wildcat State Utah

Well No. 2 Sec. 26 T. 40S R. 25E Meridian SLPM County San Juan

Location 660 ft. {N./S.} of N. Line and 660 ft. {E./W.} of W. Line of Section 26 Elevation 5211 GL
(Derrick floor relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Signed .....

Date November 8, 1957 Title Asst. Div. Supt. Prod Dept.

The summary on this page is for the condition of the well at above date.

Commenced drilling August 15, 19 57 Finished drilling September 25, 19 57

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from DRY HOLE to ..... No. 4, from ..... to .....

No. 2, from ..... to ..... No. 5, from ..... to .....

No. 3, from ..... to ..... No. 6, from ..... to .....

IMPORTANT WATER SANDS

No. 1, from ..... to ..... No. 3, from ..... to .....

No. 2, from ..... to ..... No. 4, from ..... to .....

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated From—	Perforated To—	Purpose
13-3/8	48#	8RT	H-40	294					
5-1/2	15.5#		J-55	6161					

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
13-3/8"	298	350	HOWCO		
5-1/2"	6161	250	HOWCO		

FOLD | MARK

PLUGS AND ADAPTERS

Heaving plug—Material ..... Length ..... Depth set .....

Adapters—Material ..... Size .....

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out

TOOLS USED

Rotary tools were used from Surface feet to 6167-TD feet, and from ..... feet to ..... feet

Cable tools were used from ..... feet to ..... feet, and from ..... feet to ..... feet

DATES

....., 19..... Put to producing ....., 19.....

The production for the first 24 hours was ..... barrels of fluid of which .....% was oil; .....% emulsion; .....% water; and .....% sediment. Gravity, °Bé. .....

If gas well, cu. ft. per 24 hours ..... Gallons gasoline per 1,000 cu. ft. of gas .....

Rock pressure, lbs. per sq. in. .....

EMPLOYEES

V. L. Lock, Driller Audie Higgins, Driller

T. H. Dooley, Driller Nye & Snell Drilling Company, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
5945	5995		Shale, carbonaceous, calcareous, limestone, argillaceous, anhydritic, fossiliferous.
6040	6098		Shale, carbonaceous, calcareous, limestone, argillaceous, anhydritic, fossiliferous.
6098	6140		Limestone, dolomite, shale, calcareous, fossiliferous.

WELL SURVEYS: Elec. Log: Surf to 6154-Schlumberger; Micrlog: Surf to 6154-Schlumberger GR & NS: Surf to 6158-Schlumberger; GR & NS: 4900 to 6126-Welex Jet Serv. Co. Temp Surv: B & R Serv. Co. Indicated top of cement: 5613'.

PERFORATION RECORD: 6105-6110 4/ft; 5960-5970 4/ft; 5960-5965 2/ft; 5908-5928 4/ft.
TREATMENT RECORD: 6105-6110 MCA-500 gals; 6105-6110 2000 gals/XFW; 5960-5965 20 bbls Fre-flo & 20 bbls oil; 5908-5928 500 gals MCA: 5908-5928 3000 gals XFW.

SEE ATTACHED SHEET FOR CORES AND DRILL STEM TESTS.

Summerville	778	+4433	Shinarump	2798	+2413
Entrada	982	+4229	Cutler	2986	+2225
Navajo	1210	+4001	Hermosa	4950	+ 261
Wingate	1560	+3651	"BUH"	5844	- 633
Chinle	1886	+3325	"J" Zone	5996	- 735
			"K" Zone	6147	- 936

COMPLETION RECORD: Having drilled to 6167-TD and having found no oil or gas in commercial quantities, we have plugged and abandoned this well as follows: Spot 35 sx cmt 567-467; 35 sx cmt 350-250. Regulation 4" pipe marker cmtd in place, all intervening spaces filled with heavy mud. Location cleaned. October 19, 1957.

(OVER) 16-43094-4

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